# Acquisition Policy & International Trends

# Overview

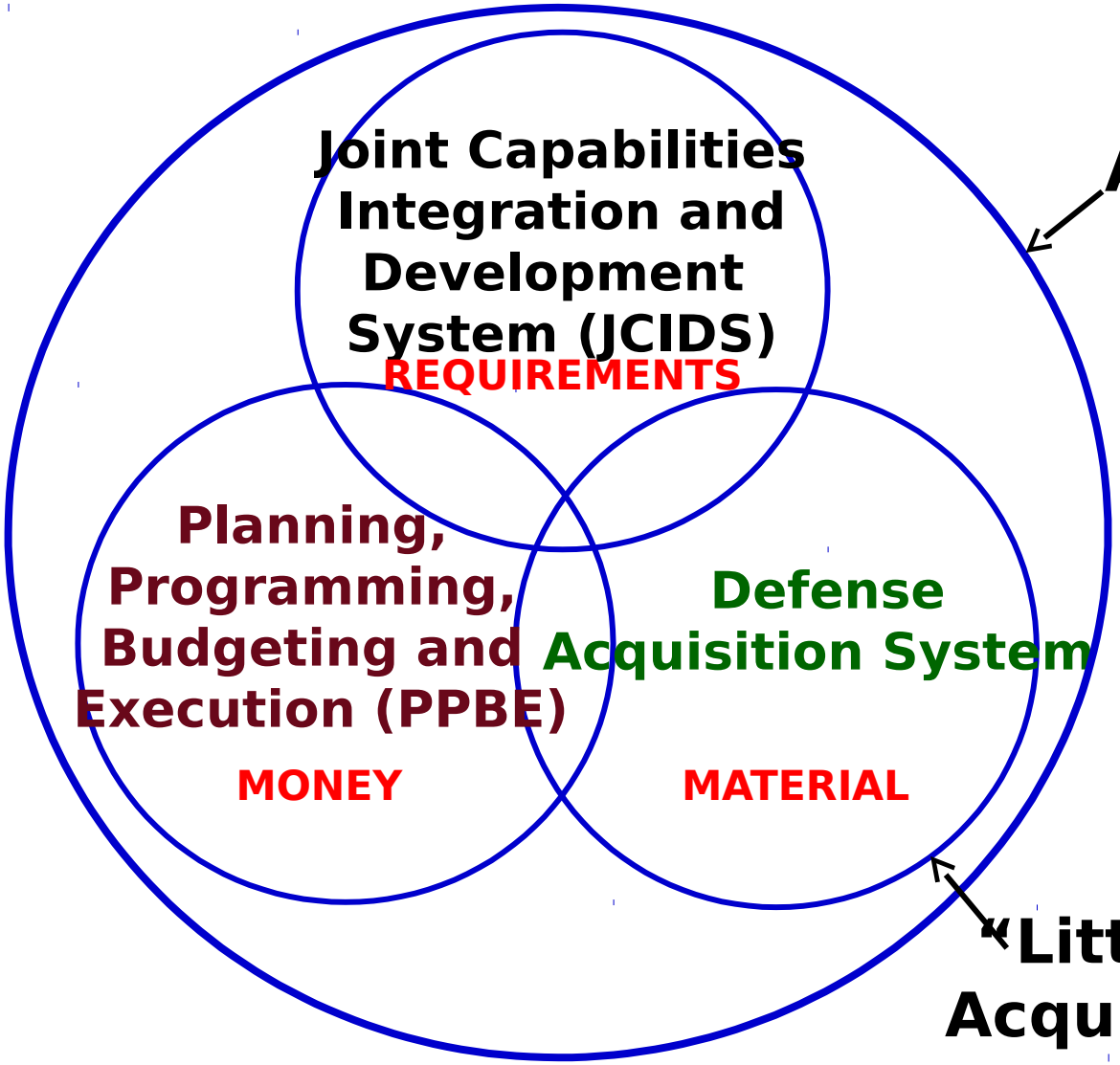
**Defense Acquisition Basics**

**International Acquisition Policies**

**Sales, Cooperation, and Defense Trade Trends**

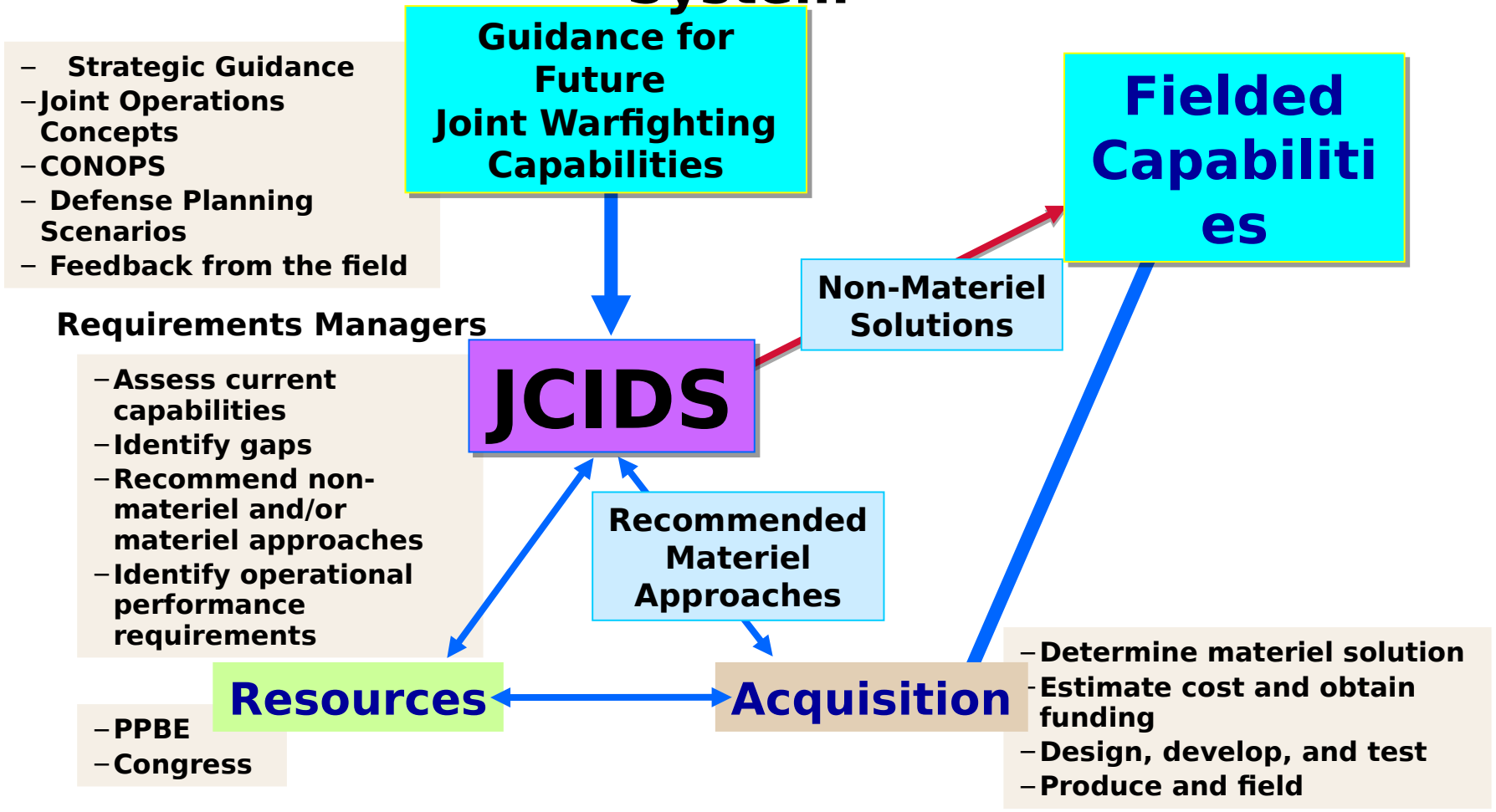
**Program Trends**

# DoD Decision Support Systems



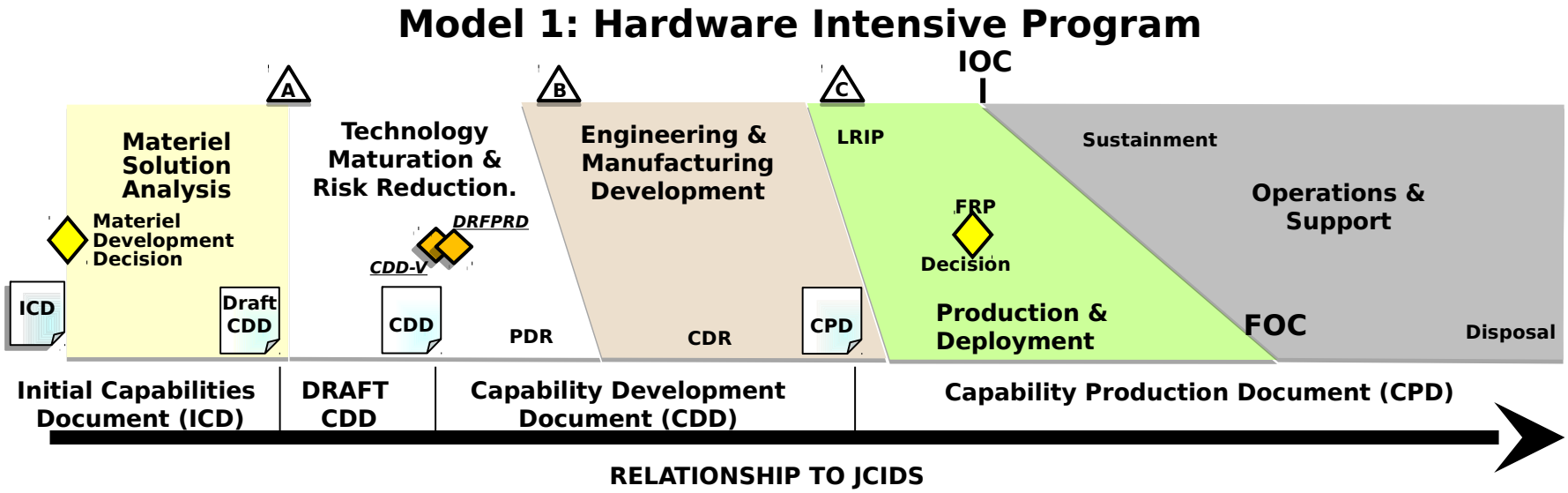
# JCIDS – The Basics

## Joint Capabilities Integration and Development System



# Defense Acquisition System

- **The Materiel Development Decision precedes entry into any phase of the acquisition management system**
- **Entrance and Exit Criteria for each phase**

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- CDD-V: CDD Validation
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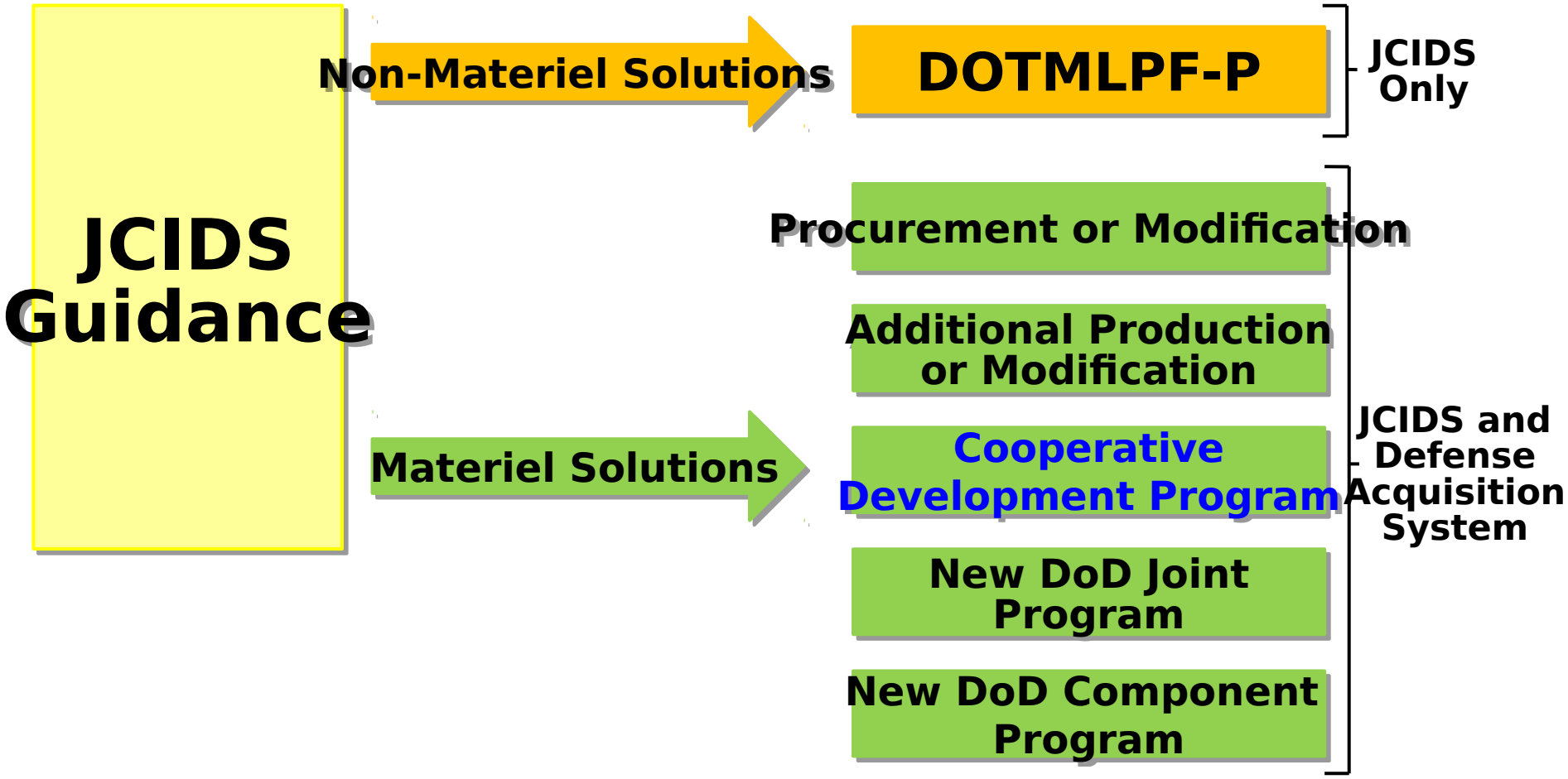
# International Acquisition Policies

# Preferred Order for Solutions



# JCIDS Provisions

**"For capability requirements documents advocating creation of international acquisition programs with allies/partner nations, Sponsors will consider to the greatest extent possible, foreign disclosure review and document structuring to facilitate releasability, in whole or in part, to the nations concerned."**

**"Other system attributes may include …… physical and operational security**

**JCIDS Manual (New in 2015 version)**

# Acquisition Strategy

**"[Program Management [PM] is responsible for integrating [IA&E] considerations into the program's Acquisition Strategy at each major milestone or decision point. [PM] will consider the potential demand and likelihood of cooperative development or production, Direct Commercial Sales, or Foreign Military Sales early in the acquisition planning process; and consider U.S. export control laws, regulations, and DoD policy for international transfers when formulating and implementing the acquisition strategy … Where appropriate, [PMs] will pursue cooperative opportunities and international i**

**DoDI 5000.02 (Enclosure 2, paragraph 7.a.)**

**New**

**c** **d**

# Cooperative Opportunities

- **10 USC 2350(a) requires Cooperative Opportunities Document before 1st milestone or decision point**
- **Statutory Cooperative Opportunities requirement is addresses in DoDI 5000.02**
  - **Due at first program milestone review**
  - **Documented in Acquisition Strategy or equivalent document**
  - **Required for MDAP, MAIS, ACAT II & III**

**DoDI 5000.02, Table 2 (Milestone and Phase Information Requirements), Page 47**

# Program Protection

**"Program protection also supports international partnership building and cooperative opportunities objectives by enabling the export of capabilities without compromising underlying U.S. technology advantages."**

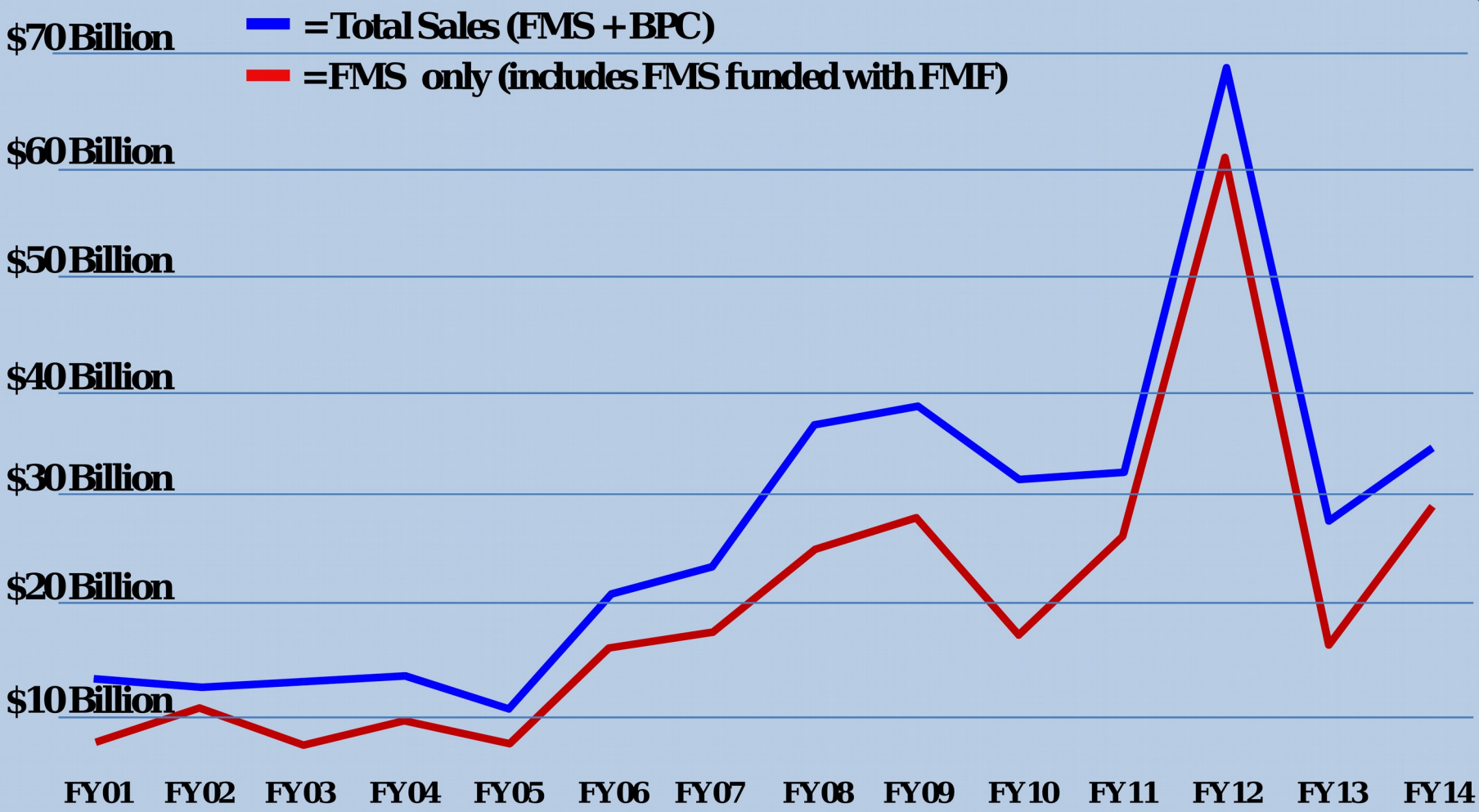
**Program managers will describe in their PPP the program's critical program information and mission-critical functions and components … [including] planning for exportability and potential foreign involvement.**

**DoDI 5000.02 (Enclosure 3, paragraph 13)**

**New**

# Sales, Cooperation, and Defense Trade Trends

# Adapting to a Changing Environment



# The Scale of FMS

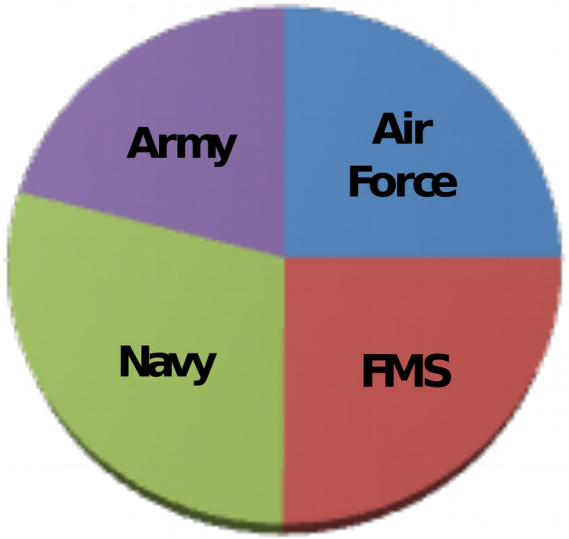
## FMS and Service Procurement: 5 Year Average, FY10-14

**#1. $45.1 Billion Navy**
(incl. USMC)

**#2. $39.0 Billion FMS**

**#3 $38.8 Billion Air Force**

**#4 $32.4 Billion Army**



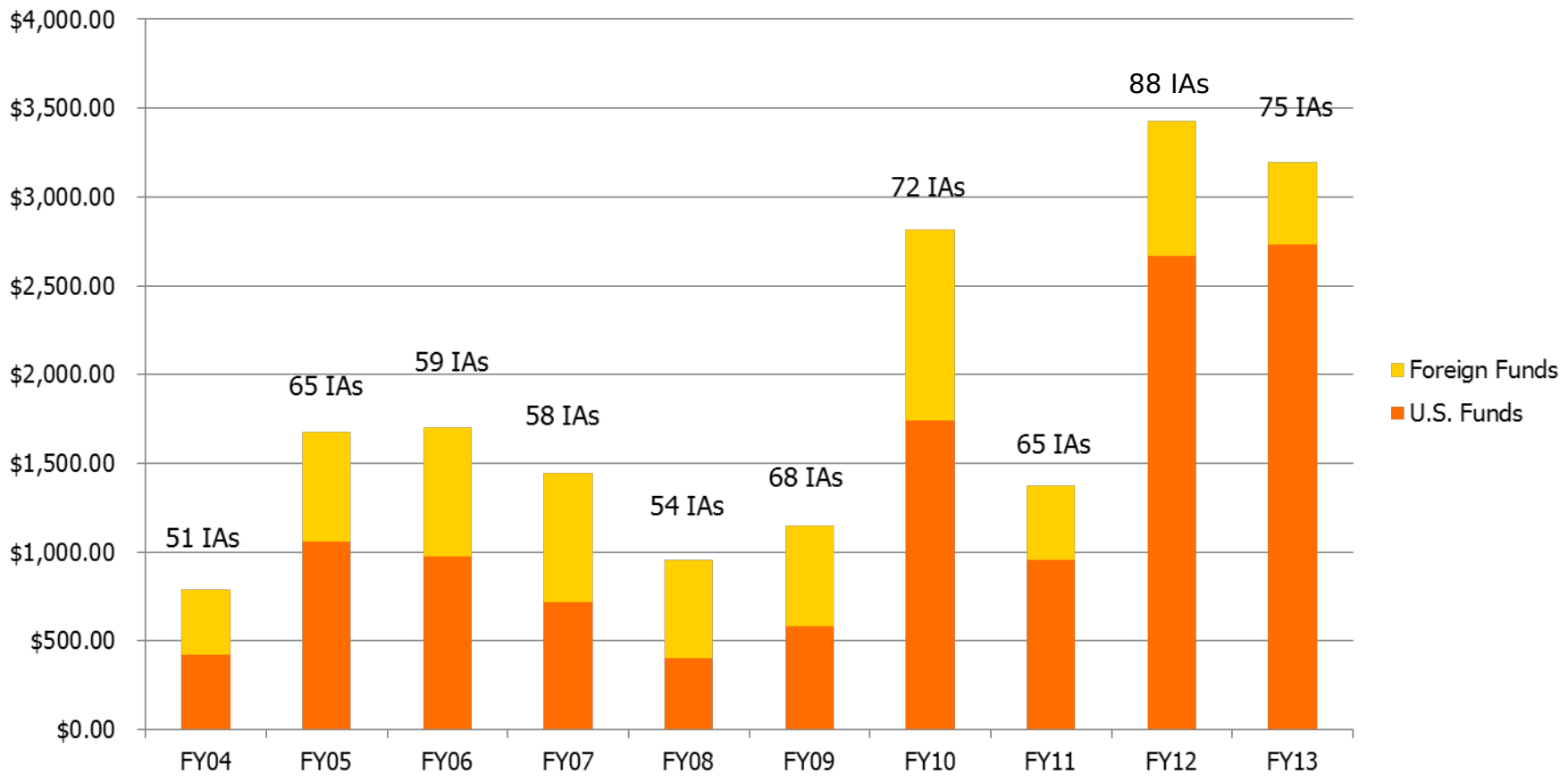

## Benefits to the U.S.

- **Builds U.S.-partner relationships**
- **Interoperability**
- **Maintain production lines**
- **Dollars into the U.S. economy**
- **Jobs**

# Agreement R&D Contributions

## ($ in Millions)






**IA = International Agreement**

# Top 10 Arms Exporters & Importers (2001-2012)

| Exporters | Importers |
|---|---|
| USA $86437 | India $28776 |
| Russia $74574 | China $27875 |
| Germany $22540 | South Korea $13896 |
| France $20829 | UAE $11914 |
| UK $12435 | Pakistan $10430 |
| China $9955 | Australia $10365 |
| Netherlands $6625 | Greece $10286 |
| Italy $6507 | USA $9095 |
| Israel $5997 | Turkey $7962 |
| Spain $5768 | Singapore $7426 |

Source: Stockholm International Peace Research Institute (SIPRI) Arms Transfer Database (US$1990 millions)

# Share of International Arms Exports (%)

| | 2009-2013 | Top 3 Customers |
|---|---|---|
| USA | 29 | Australia, South Korea, UAE |
| Russia | 27 | India, China, Algeria |
| Germany | 7 | USA, Greece, Italy |
| China | 6 | Pakistan, Bangladesh, Myanmar |
| France | 5 | China, Morocco, Singapore |
| UK | 4 | Saudi Arabia, U.S., India |
| Spain | 3 | Norway, Austria, Venezuela |
| Ukraine | 3 | China, Pakistan, Russia |
| Italy | 3 | India, UAE, USA |
| Israel | 2 | India, Turkey, Columbia |

Source: SIPRI Arms Transfer Database

# Defense Companies - 2013
## (World-Wide excluding China)

| Rank | Company | Arms Sales, 2012, ($M) | Defense Sales % of Total Sales |
|---|---|---|---|
| 1 | Lockheed Martin (USA) | 35,490 | 78 |
| 2 | Boeing (USA) | 30,700 | 35 |
| 3 | BAE Systems (UK) | 26,820 | 94 |
| 4 | Raytheon (USA) | 21,950 | 93 |
| 5 | Northrop Grumman (USA) | 20,200 | 82 |
| 6 | General Dynamics (USA) | 18,660 | 60 |
| 7 | EADS (trans-European)* | 15,740 | 20 |
| 8 | United Technologies (USA) | 10,560 | 19 |

ADS was renamed Airbus Group in January 2014

www.sipri.org

# International Acquisition Program Trends

# Program Trends

## Foreign Military Sales (FMS)

- Sale of DoD Configuration with Exportability Modification
- Integration of Buyer Furnished Equipment (BFE)
- Development and Integration of New Equipment

## Direct Commercial Sales (DCS)

- Sale of DoD Configuration with Exportability Modification
- DCS/FMS Hybrid Programs
- Sale of New or Highly Modified Systems

## International Cooperative Programs (ICPs)

- Cooperative Development of New Systems
- Incorporating Foreign Participation in DoD Programs
- Cooperation Throughout Programs' Life-Cycles

Past

Present

# Joint Strike Fighter (JSF)

## Program Description

- DoD requirement to replace the F-16, F-18, and AV-8B
- UK MoD joins as partner and accepts DoD's STOVL capability requirement
- Other partner nations follow

## Foreign Military Sales

- Current FMS customers: Israel, Japan, Korea
- Future FMS customers: TBD
- Coordination of ICP and FMS customer investment in follow-on development anticipated

## International Cooperative Programs

- Concept Demo MOUs (several)
- EMD MOU (U.S. and 8 partners)
- Production, Sustainment, and Follow-On Development

## Combined Activities

- OT&E (selected partners)
- Training
  - Various "Training Pooling" Implementing Arrangements

# RC-135V/W Rivet Joint

## Program Description

- UK retires Nimrod R1; wants to retain SIGINT capability
- UK decides to “buy into” U.S. RJ program
- USAF provides three KC-135Rs as FDA

## Foreign Military Sales

- FMS Case UK-D-SAO
- KC-135s converted to RC-135s
- Ground support equipment, spares, and training

## International Cooperative Programs

- Sustainment & Follow-on Development (SFD) MOU
- Common logistics support
- Cooperative follow-on development

## Combined Operations

- Co-Manning MOU
  - USAF to train UK cadre under FMS
- Cooperative Operations MOU
  - Framework for cooperative

# Saudi Arabia F-15SA

## Program Description

- $30B development, production, test, modification/conversion, and sustainment program
- Largest single FMS case in history

## Program Structure

- PEO: AFLCMC/CC – PEO-FB
- Security Asst PM (SAPM) (WR)
- D-SAPM Production (WP)
- D-SAPM Conversion (WP)
- D-SAPM Sustainment (WP)
- D-SAPM Training (AFSAT)

## Scope

- Production: 84 F-15SA new aircraft
- Conversion: 70 F-15S to SA's
- Sustainment: Construction/ modification at multiple

## New Development

- Digital Electronic Warfare System
- Missile Warning System
- Fly-by-Wire flight controls
- Reconnaissance pod (DB-110)

# P-8 Maritime Patrol Aircraft

## Program Description

- Navy establishes a requirement to replace the P-3
- Full cooperative program with Australia, Germany, and Italy
  - attempted w/o success

## DCS and FMS

- Current DCS Customer: India
- Current FMS Customers: None
- Future FMS Customers: TBD (but likely)

## rnational Cooperative Program

- MOU w/Australia late in EMD
- Australia decides on combination of P-8 and Navy MQ-4C Triton
- Production, Sustainment, and Follow-On Development (PSFD) MOU w/Australia

## Combined Activities

- Sustainment (logistics)
  - AUS will be treated as "13th Squadron" by Navy
- Follow-on development requirements definition
  - Australia

# IA&E Policy Discussion

*Allied and Coalition Partner Interoperability*

- **Establish JCIDS attributes for equipment**

*Acquisition Strategy*

- **Integrate IA&E considerations at each milestone/decision point**

*Program Protection Planning*

- **Consider TSFD and exportability throughout life-cycle**

*International Cooperative Programs (ICPs)*

- **Consider partnership opportunities throughout life-cycle**

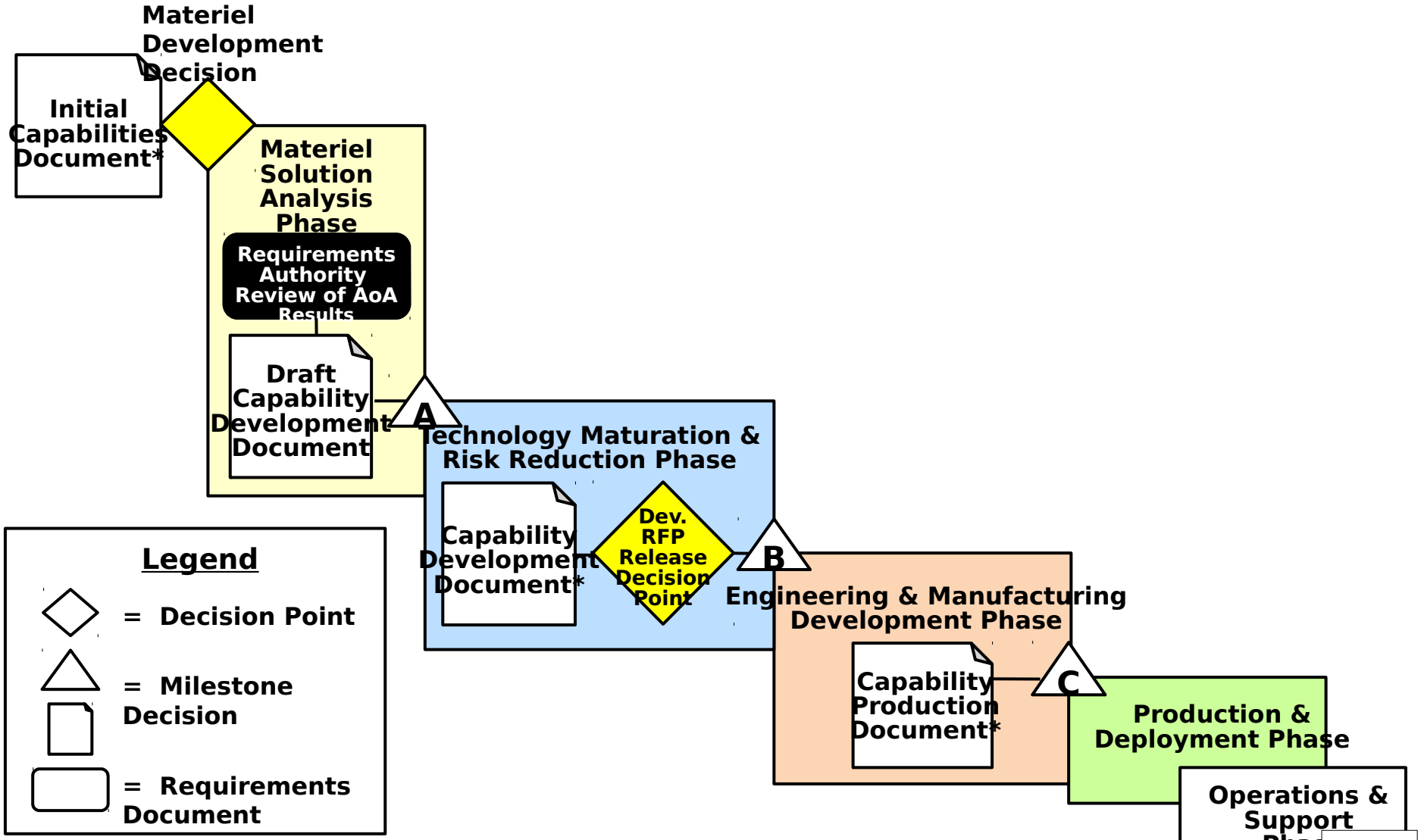
**What's driving these policies?**

**Are they appropriate?**

**Are they**

# Handouts

# Capability Requirement and Acquisition Processes




*equivalent Approved/Validated Requirements Document

# JCIDS Documents

## Initial Capabilities Document (ICD)

- Summarizes the Capability-Based Assessment
- Justifies requirement for materiel/non-materiel solutions
- Supports MDD for materiel solutions
- Guides M

## Capability Development Document (CDD)

- Outlines an affordable increment of militarily useful, logistically supportable, technologically mature capability
- Draft CDD supports Milestone A "risk reduction" decision
- Matured during TMRR and validated at requirem
  Mileston

## Capability Production Document (CPD)

- Addresses production elements specific to a single increment of an acquisition program
- Defines an increment that is ready for a production decision
- Guides the production and final testing of

# Defense Acquisition System

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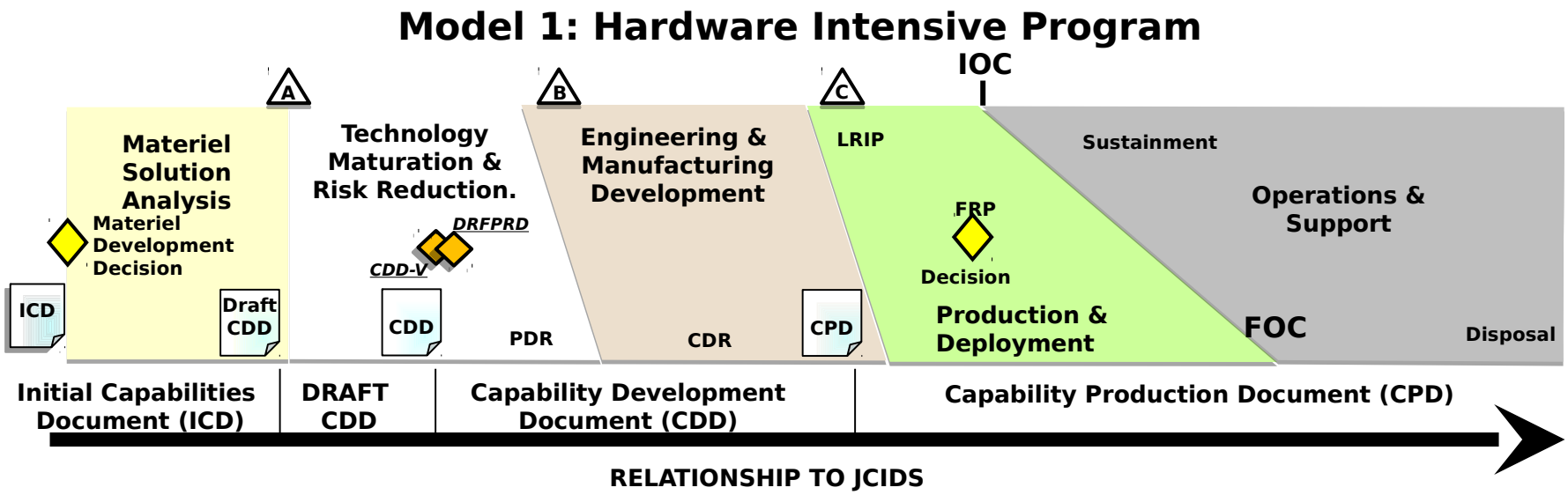


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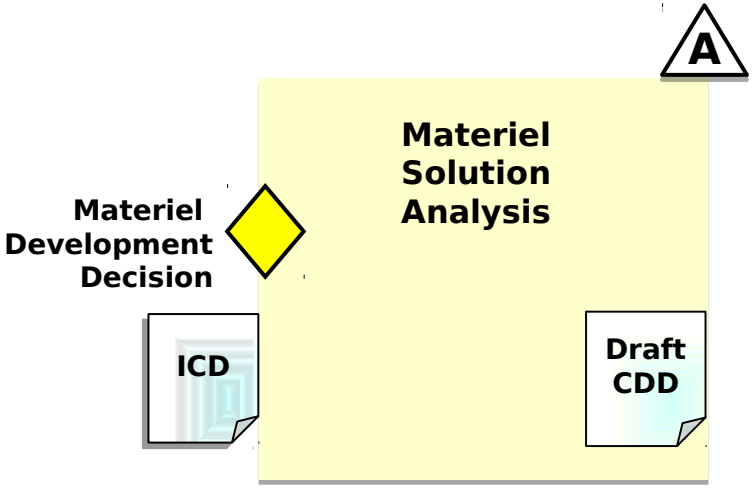
# Materiel Solution Analysis

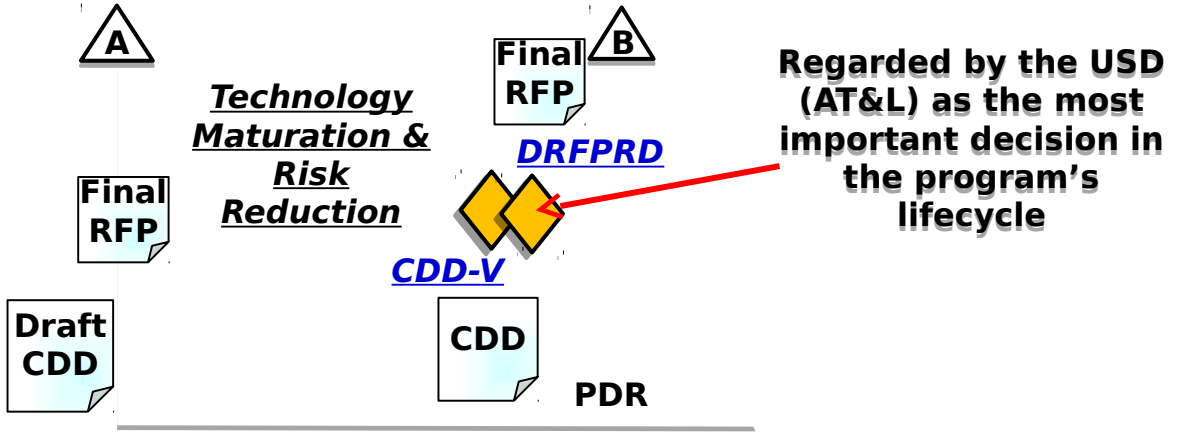
**PURPOSE: to conduct the analysis and other activities needed to choose the concept for the product that will be acquired**




- **ENTER: Approved ICD, study guidance for conducting the AoA, and an approved AoA plan. AoA study guidance for MDAPs and AoA plan approval will be provided by CAPE.**
- **ACTIVITIES: Establish PM & PMO, conduct AoA, user writes draft CDD, develop initial:**
  - **Acquisition Strategy**
  - **Test & Evaluation Master Plan (TEMP)**
  - **Systems Engineering Plan (SEP)**
  - **Life Cycle Sustainment Plan (LCSP)**
  - **Cyber Security Strategy**
  - **Program Protection Plan (PPP)**
- **GUIDED BY: ICD and AoA Plan**
- **EXIT: Completed the necessary analysis and activities to support a decision to proceed to the next decision point and desired phase in the acquisition process.**

# Technology Maturation and Risk Reduction

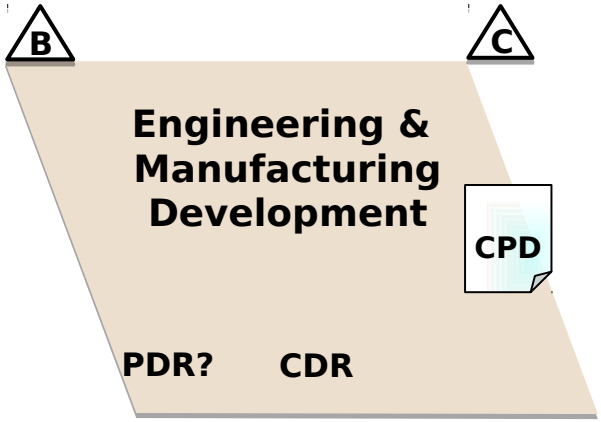
**PURPOSE: to reduce technology, engineering, integration, and life cycle cost risk to the point that a decision to contract for EMD can be made with confidence**




- **ENTER: MDA approved materiel solution and Acquisition Strategy, initial major program documentation and funding in the FYDP**
- **ACTIVITIES: Competitive prototyping of critical subsystems, SE trade-off analysis, develop contracting strategy, conduct CDD Validation, conduct Preliminary Design Review (PDR), conduct Development RFP Release Decision, begin source selection for EMD**
- **GUIDED BY: Acquisition Strategy and draft CDD/approved CDD**
- **EXIT: Demonstration that technology, engineering, integration, manufacturing, sustainment, and cost risks have been adequately mitigated to support a commitment to design for production, Validated capability requirements, full funding in the FYDP, and compliance with affordability goals for production and sustainment**

# Engineering and Manufacturing Development

**PURPOSE: to develop, build, and test a product to verify that all operational and derived requirements have been met and to support production or deployment**




- **ENTER: Adequate risk reduction; approved requirements; full funding in FYDP**
- **ACTIVITIES: Complete detailed design, system-level CDR, integrated testing, establish product baseline, demonstrate manufacturing processes and supportability**
- **GUIDED BY: CDD, Acquisition Strategy, SEP, and TEMP**
- **COMPLETION:**

  **(1) the design is stable;**

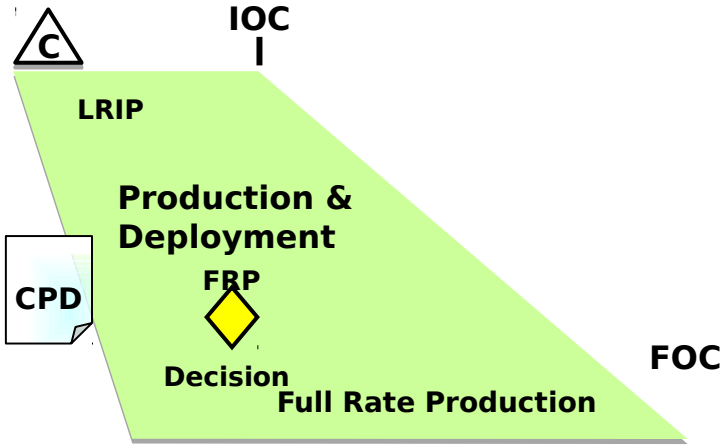
  **(2) the system meets validated capability requirements demonstrated by developmental and initial operational testing as required in the TEMP;**

  **(3) manufacturing processes have been effectively demonstrated and are under control;**

  **(4) industrial production capabilities are reasonably available; and**

# Production and Deployment

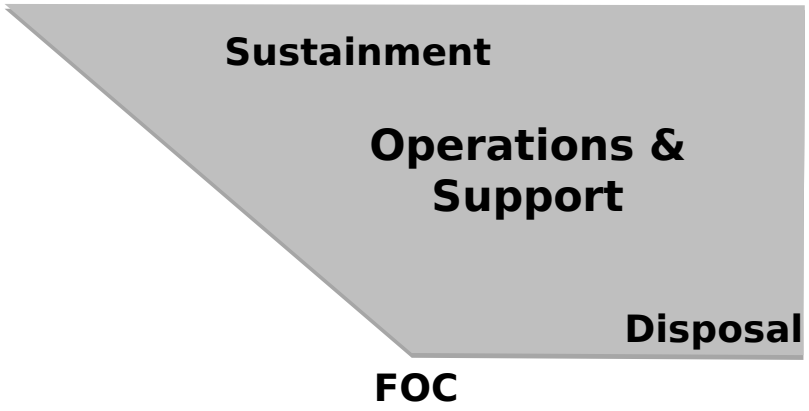
**PURPOSE:** to produce and deliver requirements-compliant products to receiving military organizations




- **ENTER: Acceptable performance in DT & Operational Assessments (OA); mature software; no significant manufacturing risks; approved CPD; acceptable interoperability and operational supportability; demonstration of affordability; fully funded**
- **ACTIVITIES: Low Rate Initial Production, IOT&E, LFT&E (if required) and interoperability testing of production-representative articles; Full-Rate Production Decision; fielding and support of fielded systems; IOC/FOC**
- **GUIDED BY: CPD, TEMP, SEP, LCSP**
- **EXIT: Full operational capability; deployment complete**

# Operations and Support

**PURPOSE: Execute a support program that meets materiel readiness and operational support performance requirements, and sustains the system in the most cost-**




- **ENTER: Approved CPD; approved LCSP; successful FRP Decision**
- **ACTIVITIES: LCSP implementation; Performance-Based Life-Cycle Product Support (PBL) planning, development, implementation, and management; initiate system modifications as necessary; continuing reviews of sustainment strategies, demilitarize and dispose of systems IAW legal and regulatory requirements, particularly environmental considerations and explosives safety**
- **GUIDED BY: CPD/Acquisition Strategy/LCSP**